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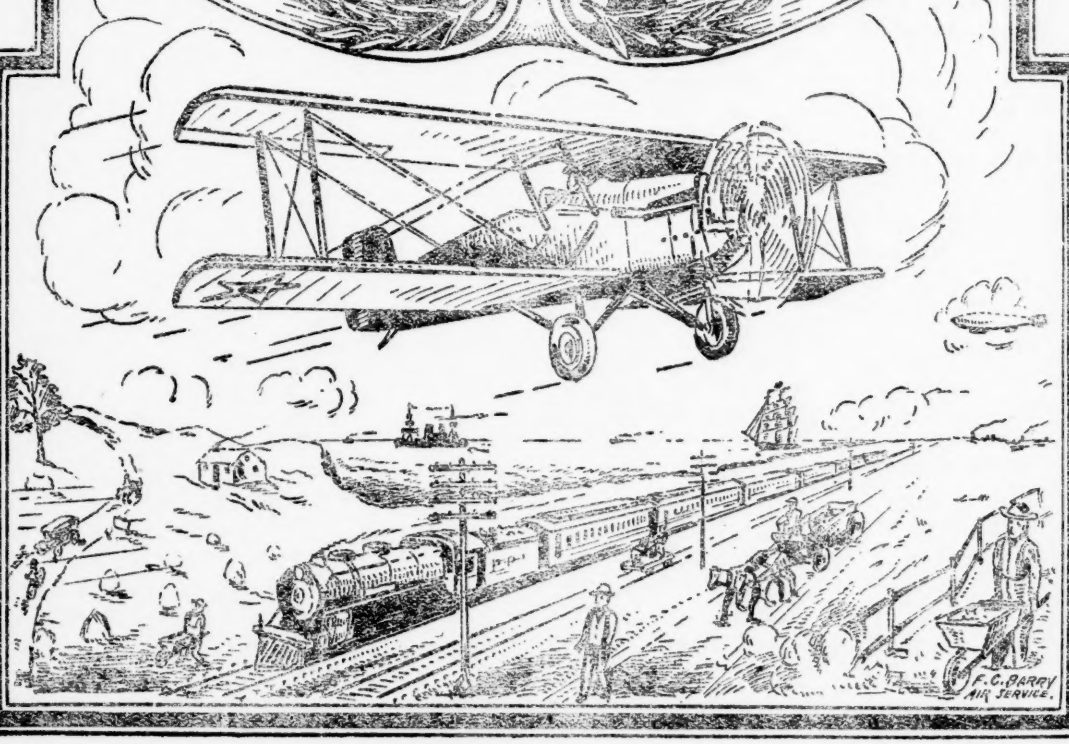

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VOL. X AIR SERVICE NEWS NO. 2
Information Division Munitions Building
Air Service February 11, 1926. Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard and others connected with aviation.

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LIEUT. MACREADY'S ALTITUDE FLIGHT

Lieut. John A. Macready's official report on his attempt to break the existing altitude record held by Callizo, the French pilot, was just received, and it will be noted that a mechanical breakage in the supercharger apparatus resulted in his airplane reaching its ceiling at 35,900 feet, over 3,500 feet short of his objective.

A rather startling piece of information embodied in the report is Lieut. Macready's statement that at 35,000 feet the temperature was minus 62 degrees Centigrad, that at 35,500 feet that temperature had dropped five degrees and apparently was slowly dropping when the ceiling of the airplane was reached. Since it is the generally accepted belief that cold becomes more intensified as higher altitudes are reached, the drop in temperature described by Lieut. Macready would appear to give rise to much speculation on atmospheric conditions at high altitudes.

The official report is quoted below, as follows:

"In an attempt to break the world's altitude record of 39,586 feet, the supercharged XCO-5 was climbed to its ceiling on January 29, 1926. A calibrated altitude of 35,900 feet F.A.I. was obtained.

Zero altitude was obtained in the supercharger to an altitude of 24,500 feet. On previous attempts for a world's record with other airplanes, zero altitude had been obtained to an altitude of 33,000 feet. The r.p.m.at 25,000 feet was 1720. At 35,000 feet it was 1620.

As on other flights a critical point in the supercharger was noticed. This critical area occurred at approximately twelve thousand feet. A movement of the supercharger throttle of 1/16 of an inch would cause an uncertain building up of supercharger pressure which would sometimes surge to 1000 feet below zero from a starting point of 3000 feet above zero.

At 24,000 feet the supercharger throttle was moved forward about one-half inch with but little gain in supercharger pressure.

A gain in altitude of 11,000 feet was obtained after the supercharger limit had been obtained. This indicated that the wing cellule of the XCO-5 had much better climbing characteristics than other planes which have been used.

The airplane is now an excellent high altitude photographic airplane. The bad features of balance have been corrected and, although the handling and landing of the airplane is somewhat different from other airplanes, it is not difficult to handle. Much value will later be obtained from this airplane, both as a flying laboratory to acquire information on superchargers and equipment and as a high altitude photographic airplane. It is predicted that this airplane will many times repay its cost of development through information which can be obtained through its use.

The air-tight front cockpit protected the pilot from the frigid drafts of cold air. The system used in lining this cockpit is excellent. It is recommended that it be adopted and used on other airplanes where cold is a factor to contend with.

The cockpit heater was very satisfactory. When climbing at low altitude the pilot, on a day when the temperature is comparatively high, would become uncomfortably warm. At high altitude the heater supplies the cockpit with sufficient heat to prevent any chance of the hands becoming frozen, in fact the pilot did not suffer from exposure to the cold on the climb even though the outside temperature was 62° C. at 35,000 feet. When the engine is throttled the cockpit becomes very cold, although the felt insulation of the cockpit prevents the extreme hardship of previous flights.

A cold draft comes through the venturi of the heater at the front of the exhaust manifold when the engine is throttled. More heat would come into the cockpit if this were closed, but with the protective clothing that the pilot wears this cold is not dangerous and I do not believe that there is any likelihood of the pilot's hands becoming frozen or frost bitten as long as the engine is functioning.

The oxygen system is practically the same as I have used on previous extreme altitude flights, and was satisfactory. Liquid oxygen is used with two flasks of gas as an emergency system.

The temperature at 35,000 feet was 62°C.; at 35,500 feet the temperature had dropped to 57°C. and apparently was slowly dropping when the ceiling was reached.

It was found on inspection that the intercooler had cracked. The crack was about four inches long and 1/8 inch in width, and probably accounted for the lack of supercharger capacity."

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NEW AMBULANCE AIRPLANE FOR KELLY FIELD, TEXAS

The new ambulance airplane for the Advanced Flying School arrived recently at Kelly Field and overhaul work was started preparatory to placing it in active service. The ship is equipped with two hospital beds in the fuselage back of the pilot's cockpit. By the side of the beds is a seat for the medical attendant and a cabinet for medical supplies. The ship closely resembles the Douglas Transport in appearance except that it has a differently shaped nose and is painted a silver color with a red cross on the side. It is designed for use in ferrying injured personnel from wrecks to the field hospital, and is built so that it can land and take off in small fields. It was ferried from McCook Field to Kelly Field by 1st Lieut. L.J. Carr, who with Lieut. J.M. Weikert flew to Chanute Field in a Douglas Transport to carry enlisted men to the Air Service Technical School, thence to McCook Field to receive the new plane. Lieut. Weiker flew the Transport back to Kelly Field.

Since the Douglas Hospital airplane arrived at Kelly Field it has gone into action twice. It was given its first practical test on January 18th when it carried Cadet J.A. Muffat of Brooks Field to a hospital after he had been seriously injured in a crash. Kelly Field was notified immediately after the crash and Captain McDaniels, officer in charge of training in the Air Service Advanced Flying School, took off at once in the new plane, accompanied by Captain Lewis, Flight Surgeon. Capt. McDaniel landed the ambulance near the wreck. Cadet Muffat was placed on a stretcher and laid in the plane, and twenty minutes after he had crashed he was in the Brooks Field hospital. Officers of Brooks Field said that it would have taken at least an hour to have brought him there in a motor ambulance.

The ambulance plane was rushed to Devine, Texas, on January 20th to bring back Cadet Ernest Stoelting, whose plane crashed at that place. Lieut. Carr piloted the plane and was accompanied by Capt. Brown, Flight Surgeon. Record time was made from the scene of the crash to the base hospital at Fort Sam Houston, Texas.

Both cadets will recover.

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FLYING TO THE PACIFIC COAST UNDER DIFFICULTIES

Old man Job did not have a thing on the six Kelly Field flyers who set out for the Pacific Coast in a Douglas air transport for the purpose of ferrying back Douglas O-2 observation planes from Santa Monica, Calif. The first mishap occurred when the transport was forced down near Alpine, Texas, with a broken connecting rod. Sergeant E.F. Nendell, ferrying a new motor for the transport, in a Martin Bomber, was forced down the next day at Sanderson, Texas, due to motor trouble. He sent the new motor on to Alpine by truck. Two days later, Friday, Lieut. G.E. Rice flew to Sanderson with two new cylinders for Sergeant Nendell's ship, but found that a new engine would have to be installed. Although the new motor reached the transport at Alpine, it was found that a new propeller would be required before it would be able to take off. Flying Cadet Nelson took off from Kelly Field Saturday with a new propeller for the transport, but was unable to find the ship and was forced to return. On Sunday, however, however, Cadet Nelson again took off with the propeller and located the transport, and shortly thereafter it proceeded on its way to Santa Monica. Lieut. D. J. Canfield, flying a Martin Bomber, ferried a new motor to Sergeant Nendell at Sanderson on Saturday.

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CONSOLIDATION OF ACTIVITIES AT KELLY FIELD

The NEWS LETTER Correspondent from Kelly Field, Texas, believes that an important step has been taken toward the betterment of the organization of that field by the promulgation of General Order No. 1. By the terms of this order all permanent activities at Kelly Field become consolidated under the title "The Air Service Advanced Flying School, Kelly Field, Texas." This should result in a saving of overhead, a keener perception of the mission of Kelly Field and a concentration of effort on the part of all personnel toward making the Advanced Flying School the best of its kind in the world. The consolidation of all combat troops stationed permanently at Kelly Field under the "School Troop Division" will result in no physical change in the status of any unit at Kelly Field. At present the only troops in the School Troop Division consist of the 3rd Attack Group. Its tactical integrity continues unchanged. The 10th School Group remains what it in effect has always been; i.e., a School Detachment. The organization of the "Academic Division" should enable personnel wholly engaged in the instruction of student flyers to be so identified and the proper cleavage made between purely academic work and routine administration. There has ever been apparent the necessity for a central control of all "operations" at Kelly Field. It is believed that the "Operations Officer" functioning under the new arrangement will necessarily become thoroughly cognizant of the details pertaining to the curriculum, and a better coordination and control of all "operations" is made possible. The "Services", which comprise all auxiliary agencies necessary to the efficient administration and supply of any Air Service Flying Station, now become a "Division" instead of a part of what has heretofore been known as Post Headquarters. It should be borne in mind that "Post Headquarters" ceases to exist. Instead, we have "Headquarters, The Air Service Advanced Flying School." It is hoped that the coming years will see housing facilities made available to fit the organization brought to life by General Order No. 1. When that time arrives, separate buildings will no doubt shelter separate activities. Until that time does arrive, temporary expedients will have to be adopted to meet the new organization.

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NIGHT PARACHUTE JUMPING AT KELLY FIELD

Four enlisted men of the Air Service, who recently made night parachute jumps at Kelly Field, San Antonio, Texas, relate their experiences as follows:

Private 1/Cl. Alford B. Goff, 10th School Group Parachute Department. "I took off for a night parachute jump at 9:30 P.M. in a DH-4B plane piloted by Lieut. E.W. Dichman. We took off southeast of the Post Operations Office at Kelly Field, going over Duncan Field and making a circle, coming back over Kelly Field down the line of hangars. After attaining an altitude of 2,500 feet, we turned due east, going over the Pistol Range and then I jumped from the right side of the plane. The chute opened immediately and I made a perfect landing opposite hangar #20."

Private 1/Cl. Willis E. Miller, 10th School Group Parachute Department. "I took off for a night parachute jump at 6:30 P.M., in a DH-4B plane piloted by Lieut. C.E. Duncan. After gaining an altitude of 2,500 feet, as previously agreed upon, Lieut. Duncan turned the plane to head south, bearing to the east so as to pass as near as possible over the landing light. It had been agreed that Lieut. Duncan should fly into the beam of light, cut the motor, and then I would jump, but due to it being Lieut. Duncan's first experience in piloting for a jump, only our wing tip hit the light beam and I jumped in the darkness. My parachute functioned perfectly and I made a perfect landing on the flying field."

Private Walter L. Robbins, 10th School Group Parachute Department. "Being equipped with a duplex training type of parachute and with Lieut. C.E. Duncan as pilot, flying a DH-4B we taxied out into the light at 9:00 P.M. and took off, circling around over the A.I.D., when the searchlight found us and continued to reflect on the ship. Heading toward the field and getting over the line of hangars between Nos. 3 and 4, at an altitude of 2,500 feet, I got up and prepared to jump. I signalled Lieut. Duncan to close

the throttle and then I jumped, falling about 100 feet before pulling the rip-cord. The chute opened immediately and drifted me away from the field. I flashed my flashlight several times, as a signal that all was well, and then the big searchlight was shining on me all the time until I was within 100 feet of the ground. I unbuckled the harness and flashed my light down to see where I was going to land. I landed on the paved road about halfway between the guard house and the gas station. I was gathering up the chute when the ambulance drove up."

Corporal Frank L. McCune, 10th School Group Parachute Department. "I took off for a night parachute jump at 9:15 P.M. in a DH-4B piloted by Lieut. L. J. Carr. We took off south of the Post Operations Office, circling over Duncan Field to the north of Kelly Field, turning and flying directly over the searchlight due south. Already having 2,500 feet altitude and getting the signal to get ready, I got up in the seat with one foot on the cowling and with the next signal I left. The chute functioned perfectly and the big searchlight followed me to the ground. I landed on the flying field."

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AIR SERVICE OFFICERS DETAILED TO GENERAL STAFF

The War Department announcement of General Staff assignments for 1926 contains the names of three Air Service officers, viz: Lieut.-Colonel Roy C. Kirtland, Major Joseph T. McNarney and Major John D. Reardan. Lieut.-Col. Kirtland will report to the Chief of Staff, War Department, Washington, D.C., upon completion of the present course of instruction at the Army War College, Washington Barracks, D.C.; Major McNarney, of the Command and General Staff School, Fort Leavenworth, Kansas, will report on July 1, 1926; and Major John D. Reardan, a student at the Army War College, will report on August 15, 1926.

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BUILDER OF MARTIN BOMBER VISITS KELLY FIELD

Mr. Glenn L. Martin, organizer of the Glenn L. Martin Company (builders of the Martin Bomber), accompanied by Mr. Lassiter C. Milburn, Engineer for the above Corporation, visited Kelly Field recently and interviewed pilots and bombers with the object of getting personal opinions regarding changes desired in the present type of bombing plane, this with the ultimate object of designing a new bombing plane for the Army Air Service.

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RADIO COMMUNICATION BETWEEN PLANE AND BROADCASTING STATIONS

A Martin Bomber from Kelly Field, Texas, recently maintained successful radio communication on a flight to Dallas, Texas, the signals being reported as strong from the plane at Dallas as when checking out of Kelly Field. Upon the return trip, broadcasting stations WFAA - Dallas, and WBAP - Fort Worth, were heard very distinctly until well south of Waco, a distance of about 100 miles. Fort Crockett radio station, at Galveston, reported the signals as being clear throughout the entire trip.

The personnel for the trip were Lieut. I.J. Williams, A.S., pilot; Lieut. W.R. McKinnon, Q.M.C., passenger; Private Martin, radio operator, and Private Velliquette, mechanic.

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AIRSHIP TA-5 MAKES ALTITUDE FLIGHT

The Airship TA-5, which was recently received and erected at Langley Field, Va., was given a test flight on January 7th. Later in the day an altitude flight was made to a ceiling of about 5,000 feet. The ship was flown by the officers of the 19th Airship Company practically all day to make adjustments and changes preparatory to the final tuning of the ship for service.

This type of airship is a one-man controlled ship which all airship pilots must first master before being instructed in the large dual controlled ships.

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REVOLVING BEACON AT LANGLEY FIELD AGAIN IN COMMISSION

The revolving beacon on top of the Hanger roof at Langley Field, which has been out of commission for several months, is again in good working order and can be easily seen quite a long distance from the field.

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OLD TIME CIVILIAN FLYING INSTRUCTOR VISITS BROOKS FIELD

Joe Lievre, the famous civilian instructor of Kelly Field in 1917-18, was a recent visitor at Brooks Field, Texas. Many of the old timers probably still have vivid memories of Joe and his methods of instruction. Joe has just returned from Mexico where he has been instructing in flying for the past six years, and has many strange and interesting tales to tell in his own uniquely funny way. He is intending to open a flying school in the vicinity of San Antonio in the near future.

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DUNCAN FIELD OFFERS COMFORTS FOR VISITING FLYERS

Visiting flyers may now alight at Duncan Field, San Antonio, Texas, with every assurance of finding a haven of rest and comfort. There has just been completed a building composed of seven sets of bachelor quarters, equipped with all modern conveniences, where the tired traveler of the air many find rest and comfort.

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FLYING TIME RECORDS AT BIGGS FIELD, TEXAS

Flying time charts and statistical charts covering the work performed by all officers permanently stationed at Biggs Field, El Paso, Texas, and all Reserve Officers attached to that field for their training periods during 1925 indicate an unusual increase in aerial activity over previous years at this small Air Service station. Eight flying officers permanently stationed at this field and 25 Reserve Officers training there during the year had 3,579 hours and 13 minutes in the air, covering twenty different kinds of flying missions, without a single accident. The greatest amount of time in the air is held by the following officers:

Second Lieut. Ray H. Clark	586:25
Staff Sgt. Fred I. Pierce, 12th Obs.Squadron	492:30
2nd Lieut. Lloyd E. Hunting, A.S.	468:43
Staff Sgt. Fred O. Tyler, 12th Obs. Squadron	374:11
1st Lieut. L. D. Weddington, A.S.	357:15
1st Lieut. Charles Douglas, A.S.	330:56
1st Lieut. Guy H. Gale, A.S.	318:10

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ACTIVITIES AT SAN ANTONIO AIR INTERMEDIATE DEPOT

During the month of December, 1925, the Engineering Department of the San Antonio Air Intermediate Depot, under the direction of Lieut. Clements McMullen, overhauled and repaired the following airplanes and engines:
Airplanes - 4 DH-4M, 8 DH-4M-2, 10 SE-5E, 4 MB-3A, 2 TW-5, 1 TA-6, 1 VE-9, 2 DH-4B, 1 DH-4B-1, total 33; Engines - 43 Liberty, 9 Wright-E, 2 Wright-H, 3 Wright-H-3, total 57.

It has been decided to reduce the space occupied by the Depot Supply Office fully fifty percent. Work was begun, and the partition which will cut down the size of the war-time office is well under way. The office personnel is now located in the west end, while the east end of the old office will be used for storing Air Service clothing. This change will effect a considerable saving in space, light and heat.

"BUSY!" - That's the word that the personnel of the Receiving and Shipping Department is well acquainted with. The following data show just what has happened in this department during the first half of the Fiscal Year 1926:

Total Outbound Shipments for Six Months ending Dec. 31, 1925:

Freight ----------	129 Shipments	--	517,495 pounds
Express ----------	22 Shipments	--	1,652 "
Parcel Post -------	77 Packages	--	1,593 "
Local Delivery ------	966 Shipments	--	1,141,500 "

Total Shipments Received during six months ending Dec. 31, 1925:

Freight ----------	331 Shipments	--	2,511,053 pounds
Express ----------	30 "	--	2,868 "
Parcel Post -------	91 Packages	--	869 "
Local Receipts -----	682 Shipments	--	1,156,332 "

Upon a recent inspection of airplane main gas tanks in this Depot, it was found that they had begun to rust around the soldered or welded fittings. The following method has been taken to prevent the recurrence of this condition: All the tanks were closely examined and all rusty spots were thoroughly cleaned with steel wool, after which a coating of "No-Oxide" was applied. After this, in order to keep a close watch on all tanks, a double-faced rack, having a capacity of 36 tanks, was built. These racks, five having been built to date, are designed in accordance with the structure of the building, are movable, and of such dimensions as to be conveniently placed between columns. They will permit the storage of any type of tank now on hand at the Depot. These racks are built in skeleton form so that all parts of the tank are visible at all times.

The Station Cost Accounting Department, in charge of Warrant Officer Charles Chester as Station Cost Officer, was moved December 29th into new quarters at the Engineering Section, with which the larger part of its activity is connected, it having previously occupied space in the Depot Supply Section.

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OFFICIAL AIRPLANE AND SEAPLANE RECORDS

Since the publication in the last issue of the NEWS LETTER of the list of official world's records for airplanes and seaplanes, a number of changes have occurred in the number of records held by the United States, France and Italy. France, as of December 1st, held 24 records recognized by the Federation Aeronautique Internationale. Since that date she gained eight more records, four of them at the expense of the Army Air Service and four records which had not previously existed, thus increasing her number of records to 32, and leaving the Army Air Service with 25 records and the Navy with 11, total 36.

On January 23rd Lieut. George C. McDonald, U.S.Army Air Service, piloting a Loening Amphibian COA-1, with inverted Liberty 400 h.p. engine, at Hampton Roads, Va., broke four records formerly held by Guido Guidi of Italy. These new records have been recognized by the Contest Committee of the National Aeronautic Association, and when they are recognized by the Federation Aeronautique Internationale, the standing of the various countries with respect to official world's airplane and seaplane records will be as follows: U.S. Army Air Service, 29; U.S. Navy, 11; France 32; Italy, 16; Denmark 2; Holland, 1.

New records since the publication of the December 1st list are as follows:

CLASS C - AIRPLANES

With Payload of 6,000 Kilograms (13,277.73 lbs.)

FRANCE:

Two records by Lucien Bossoutrot, Super Goliath Farman, 4 Farman 500 h.p. engines, at La Bourget, Nov. 16, 1925, Duration, 1 hr. 12 min. 21 sec.; Altitude, 3,586 meters.

With Payload of 5,000 Kilograms (11,023.11 lbs.)

FRANCE:

Two records by Lucien Bossoutrot, same airplane and on same date, Duration, 1 hr. 12 min. 21 sec.; Altitude, 3,586 meters (11,765 feet).

Note: There were no former records on above performances.

With Payload of 4,000 Kilograms (8,818.48 lbs.)

FRANCE:

Two records by Lucien Bossoutrot, Super Goliath Farman, 4 Farman, 500 h.p. engines, at La Bourget, November 12, 1925; Duration, 2 hrs. 19 min. 16.4 sec.; Altitude, 16,371 feet - 4,990 meters.

With Payload of 3,000 Kilograms (6,613.86 lbs.)

FRANCE:

One record by Lucien Bossoutrot, Duration, same as for 4,000 Kilograms.

Note: Above three records formerly held by Lieut. H.R. Harris and Mechanician Douglas Culver, piloting Barling Bomber.

One record by Lucien Bossoutrot, Altitude, same as for 4,000 Kilograms.

Note: Former record held by France.

With Payload of 2,000 Kilograms (4,409.24 lbs.)

FRANCE:

Two records by Lucien Bossoutrot, Duration and Altitude, same records as for 4,000 Kilograms.

Note: Former duration record held by Lieut. H.R. Harris and Mechanician Douglas Culver, Army Air Service, piloting Barling Bomber; Altitude record held by France.

CLASS 2 - SEAPLANES

With Payload of 1,000 Kilograms (2,204.62 lbs.)

FRANCE:

One record by M. Paumier, Louis Schreck Seaplane F.B.A., Hispano-Suiza 500 h.p. engine, at Argentine, Dec. 12, 1925, Altitude, 4,053 meters, 13,297 ft.

Note: Former record held by France.

With Useful Load of 500 Kilograms (1102.31 lbs.)

UNITED STATES:

Two records by Lieut. George C. McDonald, U.S.A.S., Loening Amphibian OOA-1, inverted Liberty 400 h.p. engine, at Hampton Roads, Va., Jan.23, 1926. Speed for 100 Km.179.497 K.P.H. (111.534 M.P.H.) Speed for 200 Km. 178.970 K.P.H., (111.206 M.P.H.)

With Useful Load of 250 Kilograms (551.15 lbs.)

UNITED STATES:

Two records by Lieut. George C. McDonald, U.S.A.S., Speed for 100 and 200 Kilometers. Same as for 500 Kilograms.

Note: Former records held by Guido Guidi, Italy.

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COAST TO COAST CROSS COUNTRY FLIGHT

Four Martin Bombers took off January 20th from Langley Field, Va., on a rather long cross-country flight to Rockwell Field, San Diego, Calif. First Lieut. J.M. Davies led the flight with 2nd Lieut. A.Y. Smith second in line, followed by 1st Lieut. C.F. Horton and 2nd Lieut. J.R. Hawkins.

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BROOKS FIELD FLYERS FOREMOST IN FLYING TIME

The NEWS LETTER Correspondent from Brooks Field, San Antonio, Texas, referring to articles which have on several occasions appeared in the papers to the effect that a naval officer who flew seven hundred hours the past year claimed the world's record for flying time in any one year, rises to remark that Brooks Field was certainly never questioned as to the time their pilots were in the air. He points out that seven pilots at Brooks surpassed the 700-hour mark during 1925, headed by Lieut. Fey with 935 hours. He states further that Lieut. McGinley in 1924 surpassed Fey's record with 1091 hours.

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LOW ALTITUDE BOMBING TESTS

Lieut. R.C. Zettel, Group Armament Officer at Kelly Field, Texas, conducted several experimental tests recently to determine the ability of pilots to hit targets from very low altitudes, 20 to 50 feet, also to determine the bounding and rolling qualities of different types of bombs. The 100-lb. demolition bomb rolled 193 feet from the point of striking the ground, and bounded about 10 feet into the air. The 50-lb. demolition bomb did not roll but stuck into the ground, due to rains softening the terrain. The 17-lb. bomb also stuck in the ground for the same reason. Further tests are to be conducted by Lieut. Zettel in the near future to obtain information relative to a delayed fuze bomb.

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RADIO WORK WITH THE HAMILTON RICE EXPEDITION

Captain A.W. Stevens, Air Service, recently submitted an interesting report on the results of long and short wave transmission and reception through the Hamilton Rice Expedition Base and field radio stations in the Amazon Basin, Brazil. His report was based on information furnished by Mr. John McCaleb, radio operator with the Expedition.

Captain Stevens states that although his knowledge of radio is limited, he believes that the work accomplished by the Dr. Hamilton Rice Expedition in 1924-1925 is of great value. He then goes on to say:

"Dr. Rice is perhaps the first explorer to make use of wireless in his work, since he used radio apparatus on several previous expeditions in South America. The recent expedition achieved greater success than usual, because improved apparatus was taken, capable of modification to the use of short waves. With this light field outfit, 100 and 200-word messages were sent to and received directly from London, England, and communication was established regularly at night with practically all points in the United States, from New York to San Francisco. Although located in the heart of the world's greatest forest, the apparatus was so efficient that the signals it sent across thousands of miles of jungle and ocean were reported all over the United States as being 'very strong'. In another direction, a point as far distant as New Zealand was sent to and heard from, although the messages in this case were brief.

The expedition organized by Dr. Hamilton Rice made use of wireless telegraphy for two distinct reasons: first, to receive wireless time signals from Arlington and Balboa daily so that the rate of the chronometers of the Expedition could be gotten for the accurate determination of longitude, and second to maintain communication with civilization even after the party had penetrated into the furthermost portion of the jungle. At the time that the Expedition went to South America in May, 1924, the scheme was to carry out all sending operations on a wave length of 1800 to 2400 meters. Arrangements were made with the Brazilian authorities at the City of Manaos on the Rio Negro, near the Amazon, to receive any messages sent from the Expedition Station in the forests The Brazilian station at Manaos was then to forward these messages by spark set to Santarem, thence to Para; from Para the messages were to be transmitted via cable to New York or other destinations.

Before the Expedition proceeded up river a test was made of a 3/4 KW tube transmitter to determine how far messages could be sent with this small outfit. This test was carried out at the City of Manaos and messages were sent at night to the town of Santarem, approximately 400 miles east of Manaos, on the Amazon River. The station at Santarem was called but did not reply. An operator on watch at Manaos reported that Para, 850 miles east of Manaos, was calling the Expedition station at Manaos to report reception of signals from the 3/4 KW tube set. Communication was then started with Para and several messages were sent and received without difficulty over a distance of 850 miles. At this time an unsolicited report from the operator at Para stated that the signals from the Expedition's 3/4 KW tube set were more readable than the signals from the Manaos Station using a 40 KW spark set.

The preliminary tests being satisfactory, the Expedition proceeded up the Rio Negro and Rio Branco rivers to the small settlement of Boa Vista and established a Base Station at this point, approximately 400 miles north of Manaos (Boa Vista, Longitude 60 deg. 39 min. 45 sec. West, Latitude 2 deg. 49 min. 17 sec. North). An antenna system was constructed, consisting of five wires approximately 400 feet long, suspended at an effective height of 80 feet between sectional masts constructed of poles gathered from the forest and spliced together and guyed.

This station was erected in September, but it was a month and a half before communication was effected with the Brazilian Station at Manaos; the principal trouble was due to the fact that the Brazilian operators at Manaos expected a strong crashing signal and it proved that the signal from the tube set from this particular location with a wave length of 1800 meters was less powerful than the signals received from the preliminary tests above referred to, and it was some time before the operators were able to pick up the faint signals. Even after communication was established traffic was subject to delay by unfavorable atmospheric conditions. Due to the fact that the quiet period for

static interference was between 5:00 and 7:00 a.m., transmission was carried out in daylight and consequently signals were weak at the receiving station. It was found that for reliable daylight communication over a distance of 400 miles at least 3/4 of a KW of continuous wave energy was necessary, although in favorable conditions during daylight the station at Manaos has been reached often with a power of only 350 watts output.

Time signals and press news were received from N.B.A. Navy Station at Balboa, Canal Zone, on approximately 7000 meters. It is supposed the power there is 30 KW C.W.C. transmitted output of 15 KW. These signals were received in good strength at 6:00 p.m. 60th Meridian time, but as the daylight belt comes over the 60th to 80th Meridian, these signals decreased in strength to about one-third the original intensity. U.S.S. Annapolis time signals were very audible at 1:00 p.m. Balboa at 2:00 p.m. was fair; both times were 60th Meridian.

At the station of Boa Vista the 360 meter wave from KDKA, Pittsburgh, could not be heard, using a receiver consisting of one stage of radio, detector and one state audio amplification, while the 62 meter sent simultaneously was received in good strength to the extent of enjoying the music. It is to be understood that conditions here create the worst possible output to the transmission and reception of electric magnetic waves. While broadcasting stations in the United States have been reported many miles more distant than the Boa Vista location, they could not be received with a standard arrangement of three tubes. It is interesting to note that ocean-going steamers traveling up and down the Amazon River do not use their wireless apparatus until they get to the Atlantic ocean, partly on account of the difficulty of receiving and sending signals over the forest with the long waves customarily used.

As stated, the power at the station at the settlement of Boa Vista was limited to 3/4 of a KW output by several factors, principally transportation of apparatus and fuel for primary sources of power. This power was found inadequate for constant daylight transmission waves of 1800 and 2400 meters at a distance of 400 miles over tropical forests.

It was the practice of the operators to confine transmission from Boa Vista to Manaos to early morning hours, namely, at 7:00 a.m., in order to take advantage of the minimum of atmospheric disturbances which obtained at this hour.

Short Waves: Realizing the possibility of short wave communication, a receiver and transmitter were constructed and put in operation December, 1924, and communication established with amateur station 2CVS New York. Since that time signals have been exchanged with the following distant stations:

Station	Date	Time	Location
2CVS	12-12-24	12 a.m.	New York City
6OI	12-15-24	5 a.m.	Stanford Univ. Calif.
2AP	12-24-24	4 a.m.	Wellington, New Zealand
1COT	12-26-24	12 a.m.	Braintree, Mass.
5SK	1- 9-25	11:30	Fort Worth, Texas
1AB	1-14-25	4 a.m.	Rio De Janeiro
6CHL	1-15-25	2:40 a.m.	San Francisco, Calif.
9ZT	1-18-25	6:40 a.m.	Minneapolis, Minn.
2NM	1-19-25	3:40 a.m.	Queenslark, Surrey, Eng.

Time is 60th Meridian, West.

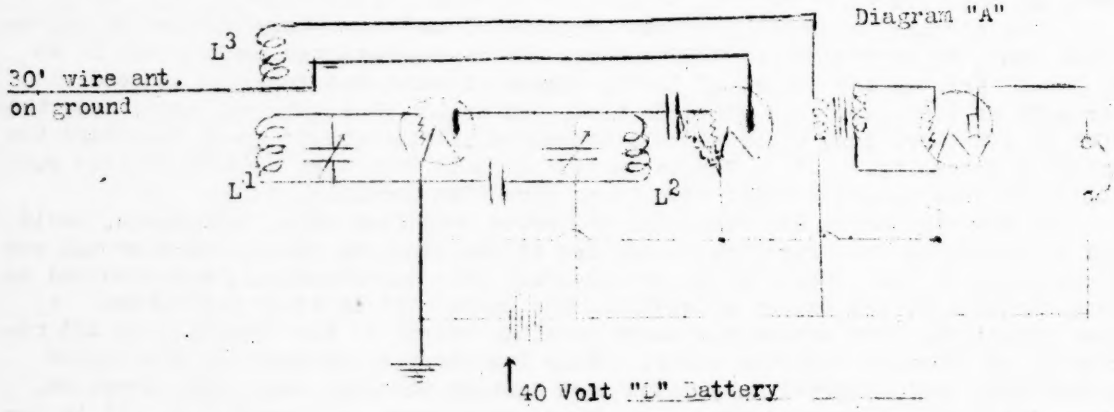
All stations, with the exception of Rio De Janeiro and New Zealand have reported signals from this station as being VY SQA (very loud). This was accomplished with 180 watts energy output at 356.2 kilocycles. One instance of working through partial daylight is the exchange of signals with station 9ZT in Minneapolis, 6:55 a.m., 60th Meridian. 9 Zt called just as 2MC New York had finished sending to this station WJS so that both stations were worked in daylight and signals from this station were reported loud and strong at 9ZT and 2MC. It must be remembered that atmospheric disturbance is maximum at night and always very strong in this part of the country, but short wave signals may be copied during all hours between 6 p.m. and 7:30 a.m. Those received after 7:00 a.m. are usually from west coast and middle west of the United States.

Atmospheric conditions: Data was compiled to ascertain relation of cloud, wind and atmospheric pressure to atmospheric disturbances.

After six months of observation, only high wind can be associated with the increase of atmospherics. Clouds do not affect conditions for reception; although the entire sky visible maybe formed into nimbus clouds, no perceptible effect has been observed. Therefore the tremendous advantage of short waves can be readily estimated for use in consistent communication, especially in tropical countries.

Most efficient reception of the short waves is obtained by using an insulated wire between 30 and 40 feet long, pointed in the direction of the station to be received, and either buried or placed on the ground. The receiver consists of only three tubes, as per schematic diagram below:

Diagram "A"



For transmission, antenna constructional cost and time is exceedingly small, compared to that of long waves for a given distance of communication. It is particularly adapted to mobile stations, having a limited space to erect antenna (particularly aircraft).

EQUIPMENT

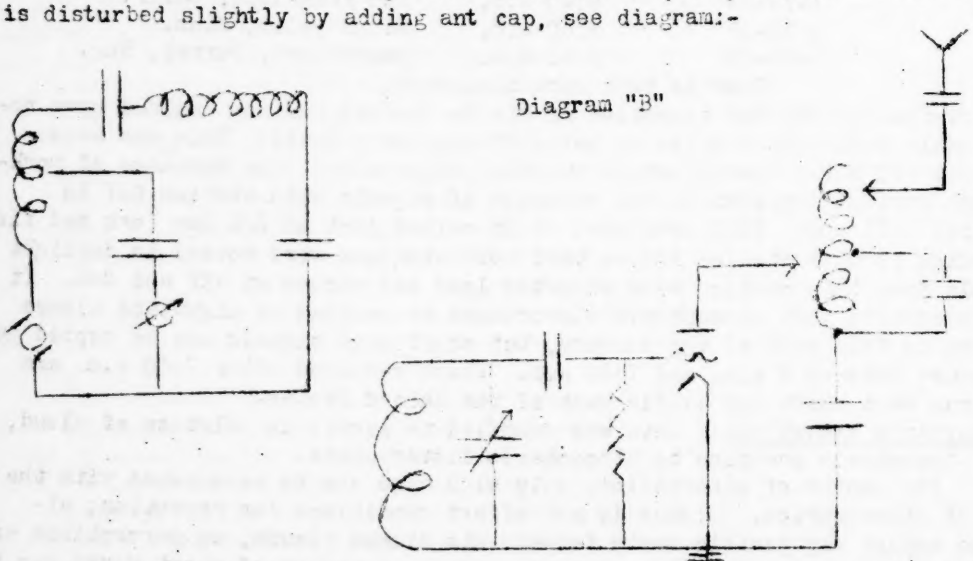
Receiving: Utilizing a stage of radio frequency amplification in which regeneration of the original signal is obtained by the 'tuned plate' system, the elimination of the usual coupling coil to transfer energy from the amplifier to the detector for rectification by taking advantage of the high voltage drop across a parallel resonant circuit of low resistance at a resonant frequency, a stage of audio frequency amplification to amplify the rectified signal - 1 stage only to be used where atmospherics are strong.

A slight increase of signal and perceptible decrease of static is obtained by connecting antenna on plate of detector. Closer coupling may be used, the 'feed back' effect of the coil L-3 compensating increase of resistance.

Transmitter: A persistent oscillator may be made by the use of a circuit developed at this station called a momentum circuit, consisting of a small inductance and large capacity, thereby obtaining a low resistance circuit and very large currents flowing therein. The action of this heavy current flowing is to offset any shifting phase in plate circuit due to D.C. current flowing therein to plates of tubes. Secondly, it has the effect of a fly-wheel in motion when the driving member meets with resistance.

This circuit very nearly determines the frequency of the emitted wave. It is disturbed slightly by adding ant cap, see diagram:-

Diagram "B"



By drawing this circuit differently, we have [illegible] that is ideal from the one

point of view of power transmission. See diagram -

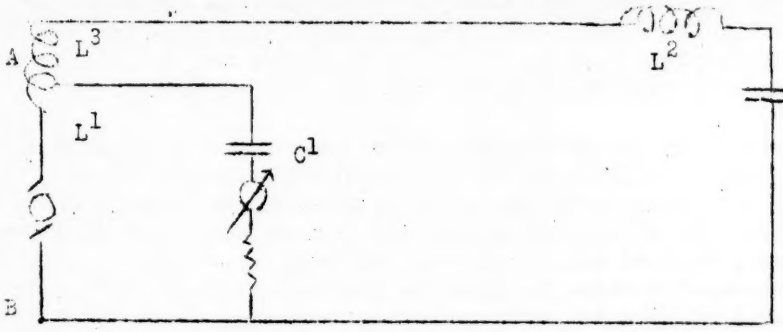


Diagram "C"

The tube is replaced by an alternator feeding a parallel circuit of low resistance L_1C_1. The impedence of this is maximum at its resonant frequency. Across this is connected the circuit to be supplied, namely, the antenna, which is a series resonant circuit offering minimum impedence to the frequency to which it is attuned, and by adjusting L_2C_2 so that its period is equal to that of L_1C_1 we have the following ideal conditions.

A supply circuit having maximum impedence to a frequency determined by its L C Values consequently having a very high voltage drop across its terminals A_1B to which is connected a series circuit L_2C_2, offering minimum impedence to the frequency to which it is attuned, in this case the frequency of circuit L_1C_1, which by virtue of working it about 20% below its fundamental contain high radiation resistance.

Primary Power Supply: Delco 1¼ KW generating plant - Battery unit of 120 volts, 80 ampere hour capacity, Due to the desirability of a light weight unit the batteries could only have a maximum of 80 amp. but by floating the Delco generator across them the current drainage is equally divided so that batteries are not abused. This system has been in operation approximately eight months, running ten hours per day and unfailingly delivering 7.33 KW hrs. per gallon of kerosene and pint of lubricating oil. A 3 h.p. motor generator delivering 1000 volts at 1.2 amps. converts the low potential supply to power suitable for the input of the transmitter.

Field Station: A "Caille" single cylinder canoe motor was used to drive an automobile generator, which charged a storage battery. The motor was left attached to the end of the canoe, but the canoe was drawn out of water until only the stern remained immersed. The motor then ran uniformly, with the propeller acting as a brake, and received its cooling water from the river. A V-shaped rim had been bolted to the fly wheel, and from this V pulley a belt ran to the auto generator. Thus it was only a moment's work to start charging the battery after landing for a camp. Later in the evening, or in the early morning hours, the battery and generator together delivered current to a small motor-generator which delivered current of higher voltage to tube set. For receiving, the motor was shut down because of noise, and battery only used; this involved keeping an extra man up to start and stop the motor on signal from the operator. The same motor was used for propelling the canoe wherever clear stretches of water were available; at other times the canoe was paddled, poled, pulled or carried. From considerations of size and portability, the field station was limited to a power output of between 25 and 50 watts, this being sufficient power for reliable communication on short waves to distances up to 200 miles day or night.

The practice was to send messages from the field station to the operator at the Base Station at Boa Vista, where it was easily possible with a power output of one-fifth kilowatt to reach either England or the United States, the operator at Base copying and re-sending.

Experimental Process. A system was evolved whereby signals from the field radio station were to be received through a receiver and amplifier well shielded from induced currents from the main transmitter. This signal caused a relay to function which in turn controlled the power from the Base Station's transmitter by closing the grid leak circuit. This system was deemed a great advantage, inasmuch as it gave the Field Station the power properties of the Base Station with the Field Station's weight and portability of apparatus.

Results: The signal from the Field Station at night was of sufficient intensity to control the transmitters, but due to increased static (atmospherics)

at that time it was found impossible, with adequate apparatus, to eliminate sufficient static in order that the signal would predominate. This plan for direct communication was finally abandoned due to inability to change the signal-static ratio, but still remains to be further developed for its numerous advantages in field communication.

Summary: The important problem of weight and transportation of field radio communication may be reduced to simplicity by the use of an efficient relay whereby the mobile field station controlling the Base Station can incorporate all the advantages of power and efficiency of a fixed station and those of a mobile station - compactness, reduced weight and ease of transportation.

It is suggested that consideration be given to the importance of this system and that apparatus be developed to prove its practicability. It would seem that there would be use for direct relay from airplane through advanced base direct to headquarters.

Comparison - Long and Short Waves: After station WJS had been in operation for four months, weather conditions caused frequent interruption in communication between Boa Vista and Manaos, a distance of 400 miles. Up to this time work had been confined to present long wave transmission and improvements on antenna system.

On December 10th a short wave set of about 100 watts output was put in operation and a New York station worked. This was the beginning of a very efficient link in communication. With original arrangements, amateur stations in New Zealand, England and United States were worked. Later, by increasing the output power to about 150 watts, uninterrupted communication was conducted with New York in spite of extremely adverse tropical weather conditions.

Another link in communication was added when messages were exchanged with England. This gave WJS at Boa Vista, Brazil, direct communication with New York and London, and from both places signals from this station were reported as being very loud and consistent. Had there been more than one operator at the Base Station regular service direct between any of the cities in the United States and important cities of the world, such as Rio De Janeiro, Buenos Aires and London could have been maintained. Obviously, with those numerous routes to handle traffic as compared to the one at Manaos on long waves, the supremacy of short waves is proven.

Apparatus: Primary source of power consists of a Delco $1\frac{1}{4}$ KW unit and battery of 80 amp. hr. capacity. When large long wave transmitter is used, it is floated across line to take up excessive drain on battery.

Long wave transmitter having an output of $\frac{1}{2}$ KW and made in two separate units, inductance, and set including tubes, etc., both mounted on detachable legs for supports. With this circuit shown in diagram below

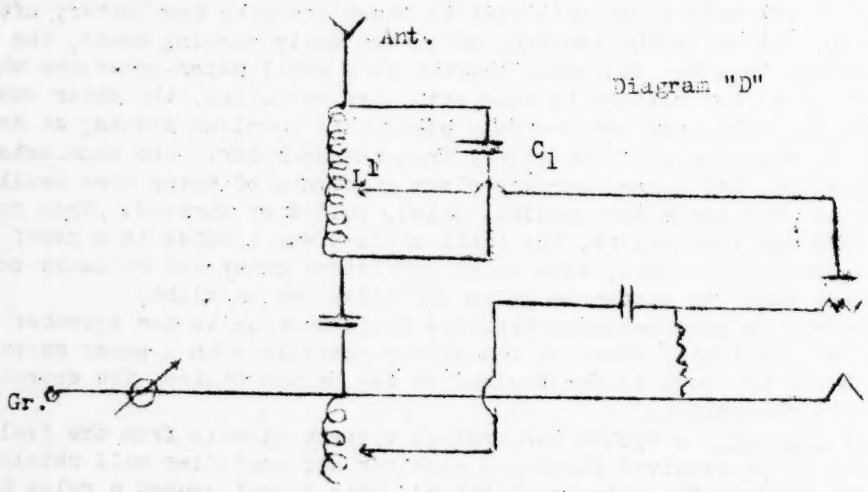


Diagram "D"

advantage was taken of the property in a parallel resonant circuit at its natural frequency and the high voltage drop across its terminals due to heavy circulating current in L_1C_1 having low inductance and high capacity resulting in a low resistance circuit having a maximum impedence at its natural frequency. An antenna of suitable characteristics was directly connected across the terminals "Ant." and Gnd. and no increase in efficiency was noticed when antenna was tuned. The natural period of the antenna was within 40% of the working wave.

This circuit L_1C_1 had determined the frequency of the transmitted wave and prevented any trouble with grid period affecting frequency. This was particularly advantageous for a semi-permanent antenna having average resistance of those constructed hurriedly in the field.

Short waves: A small power set having an output of approximately 150 watts is shown in Diagram B. This is a tuned plate circuit and takes advantage of coupling to a portion containing very large currents, in this case the antenna circuit is tuned. The long wave antenna was excited at one of its harmonics and proved to be an exceptionally good radiator on 93 meters.

Receiver: This utilizes the tuned plate system of regeneration and again advantage is taken of the high voltage drop across the terminals of a parallel resonant circuit at the frequency determined by its inductance and capacity. Selectivity is afforded by virtue of a decreased signal for other than the frequency to which the circuit is attuned. See Diagram C.

The antenna, which consists of about thirty feet of insulated wire, is laid on the ground in direction of transmitting station and is connected to the plate of the detector, thus transferring energy through the tickler coil to the radio frequency amplifier.

A reduction of static is accomplished by connecting the antenna to plate terminal of the detector tube. Due to the reduction of static greater signal energy may be transferred to the radio frequency amplifier by closer coupling of L-3 to L-1. The added antenna resistance due to closer coupling is compensated by feed back action of the tickler coil. Thus it may be seen that this tickler coil L-3 has many uses, but principally that of changing the signal-static ratio

In conclusion, it has previously been supposed that stations near the equator were exceptionally poorly located for regular communication, because of static and other troubles. The Boa Vista station was less than three degrees from the equator; it was about 300 feet above sea level; it was surrounded by many hundreds of miles of dense tropical jungle. In spite of these difficulties and the fact that it was possible to erect an antenna only 80 feet above the ground, the station apparently got better results than many other stations more favorably located and that had far more power output. One feature to be noted is that stations in Great Britain said 'Your signals are very strong; we have been hearing you every night.' New York also reported 'Very strong signals.'

Amateur stations were communicated with on short wave, as against professional stations on the long wave. Many of the amateur stations reached in the United States were located at colleges, and operated by students interested in radio. Other amateur stations were worked by enthusiasts connected with radio supply houses; still others were worked with privately owned outfits. In all cases the amateurs worked in connection with a radio league, and there was fine cooperation in getting messages forwarded to any point desired. Advatnage was taken to send messages via New York to the Chief of Air Service at Washington. Messages were sent to the American Geographical Society in New York very regularly, and replies were received regularly; long messages were sent to the Royal Geographical Society through amateurs in England. Many messages were sent to families of members of the Expedition, scattered all over the United States, assuring them at Christmas time that all was well with the Expedition.

Supplies were ordered by wireless; in several cases the order was wirelessed to New York, then cabled back to Manaos, to be shipped from Manaos up river to Boa Vista and other up river points. This was necessary whenever long-wave communication could not be held direct from Boa Vista to Manaos. From the experience gained on this recent trip, it is certain that another expedition will depend wholly for communication on wave lengths of 80 meters or less."

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CRACKED WATER JACKET DECEIVES MECHANICS

Lieut. J.R. Drumm, of Langley Field, Va., wishes to call attention to the following information which will be of interest and aid to all Air Service personnel:

An L.W.F. Transport, while flying from Mitchel Field to Langley Field not long ago was forced down at Mardela Springs, Md., with broken propeller reduction gears. The motor was changed and a direct drive engine installed with a cruiser propeller. This had sufficient power to carry the ship, but the water could not be retained in the cooling system. Each time the motor was run up the water was forced out through the overflow. Change after change was made,

as the trouble could not be located. After two weeks of intermittent work on this motor had been conducted, it was noticed that a little water came out of one exhaust and upon examination of the cylinder it was learned that it had a cracked water jacket on the inside. After the cylinder was changed the whole system worked smoothly. It later became obvious that the compression from this cylinder getting through the break into the cooling system was pressure enough to force the water out of the overflow.

Information regarding troubles of this nature will undoubtedly save others much time and worry should a like occurrence happen to them. Note that for a long time there was no water escape through the exhaust and no indication of any trouble of this kind except the water overflow. Expert mechanics were working on this engine from the time the motor was changed until the cylinder was changed and the delay in locating the trouble could not be attributed to inexperience.

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LIEUT. GEORGE E. HODGE RESIGNS HIS COMMISSION

Lieut. George E. Hodge, Junior Aide at the White House and on duty at the Office of the Chief of Air Service for four years, has resigned from the Army. His resignation took effect, it has been learned, on December 17th. His separation from the Air Service has been contemplated for a long time, due to the inequality of promotion in that branch of the Army, and several other matters that aviators generally objected to.

Lieut. Hodge was in the Personnel Division of the Office Chief of Air Service and had an opportunity to make a study of the promotion situation, fully realizing the hopelessness of promotion in a branch where a majority of its junior officers are at the bottom of the promotion list.

He enlisted in the World War service January 9, 1918, from Boston, Mass., as a private, 1st class, and was commissioned a second lieutenant on May 7th of the same year. He was graduated from the Mitchell Military Academy at Billerica, Mass., in 1902, and immediately joined the State Street Trust Company of Boston, advancing through the various positions from messenger to paying teller, which concern he left to go into the service. In 1905 he enlisted in the Eighth Company, First Heavy Artillery (Mass. Militia), receiving his discharge in 1908, and in the fall of 1916 joined the Business Men's Organization connected with the First Corps Cadets, Boston.

Lieut. Hodge made many friends in the Army, and especially in the Air Service. One notation in his official file in the War Department is as follows: "He is a valuable man in the Air Service on account of his attentiveness to duty, his perseverance and general efficiency, as shown in the performance of his duties." In connection with his resignation, the Chief of Air Service on December 3rd wrote to the Adjutant General of the Army by indorsement:- "Lieutenant Hodge is an excellent officer, whose services have been eminently satisfactory, and the Chief of Air Service regrets his desire to resign. Under the circumstances, however, he sees no other course than to recommend approval of the same."

Lieut. Hodge applied for such leave of absence as was due him before resignation. He gave as his reasons that he "feels his interest can be better served in the business world." He accepted a position with the Textileather Company at Newark, New Jersey, a concern that manufactures proxylin treated textiles such as are used in the automotive industry. Home address at present is the Newark Athletic Club, Newark, New Jersey.

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FORCED LANDING BY THE LIGHT OF THE MOON

The pilots at Biggs Field, El Paso, Texas, were recently engaged in night flying practice, each pilot remaining in the air fifteen minutes, "take-offs" being made by searchlight and landing by ground flares. Lieut. Guy H. Gale, with Corp. Dewey Weaver, 12th Obs. Sqdn., as mechanic, narrowly escaped a serious accident through coolness and skillful handling of his DH. While at an altitude of 1,000 feet he developed motor trouble and was forced down on strange ground. Luckily there was the light of a faint moon and Lieut. Gale made a safe landing without injury to himself, passenger or ship, despite the rough ground.

PARACHUTE JUMPS BY THE WHOLESALE

The unique demonstration of parachute jumping which took place at Kelly Field, Texas, on the afternoon of January 14th proved a marked success from every phase. The numerous spectators from San Antonio who came out to witness the jumps voiced their approval of the spectacular jumping of six men from one plane. At a few minutes before 2:00 o'clock 1st Lieut. John P. Richter, A.S., 40th School Squadron, took off with seven enlisted men from the 10th School Group Parachute Department in one of the new Douglas Transport planes, circling the field and gaining an altitude of 2000 feet, the trap door in the passenger compartment of the big plane was opened and the men jumped one after another in as fast a time as possible. The order of their jumps was:

1st Corporal F.L. McCune, 10th School Group Headquarters.
2nd Private W. L. Robbins, 68th Service Squadron,
3rd Private A. B. Goff, 42nd School Squadron,
4th Private W. E. Miller, 42nd School Squadron
5th Private C. S. Robbins, 43rd School Squadron, and
6th Sergeant H. R. Utterback, 43rd School Squadron.

Staff Sergeant A. W. Thiemann, 41st School Squadron (the seventh enlisted man) timed the men as they jumped and found that the ship was emptied in exactly 12 seconds. The parachutes were all of the regulation type. Private W. L. Robbins, although the second man to jump, maneuvered his chute in such a manner so as to hasten his descent and was the first to land. A stop watch held by Staff Sergeant Thiemann on Sergeant Utterback, the last man to jump, showed that it required him just one minute and 27 seconds to negotiate the 2000 foot drop to terra firma. According to Sgt. Utterback, the cabin of the plane was warm, the air was a bit cool and the ground was plenty hard. The hospital truck rushed across the field as soon as the jumps were made and quickly picked up the six men who fell within a comparatively small area, due to the rapidity with which they left the plane. All men made safe landings, none of them suffering any bruises or injuries. The success of the demonstration is another point in favor of the new Douglas Transport, which is rapidly becoming a popular plane among the Kelly Field fliers.

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CREATION OF AIR SECTIONS IN W.D. GENERAL STAFF

Major General John L. Hines, Chief of Staff, recently sent the following memorandum to The Adjutant General:

"The recommendations of the Board appointed by the President of the United States on September 11, 1925, to make a study of the best means of developing and applying aircraft to National Defense include the following:

"*****

(3) It seems desirable to give to aviation some special representation on the General Staff. There has not as yet been opportunity for many aviation officers of suitable rank to be qualified for membership on the General Staff. We therefore recommend that the Secretary of War create, administratively, in each of the five divisions of the War Department General Staff, an air section, to be headed by a General Staff or Acting General Staff officer detailed from the Air Corps (Air Service); such section, under the same supervision as other sections of its division, to consider and recommend proper action on such air matters as are referred to the division.

To accomplish this it may be necessary to waive in these instances some present qualifications for membership on the General Staff. This plan may seem inconsistent with one of the fundamental principles of the General Staff - namely, that no member represent any particular service. We think the good to be gained, however, justifies departure from the general rule. Obviously, the men designated for such staff positions must be of a temper of mind to appreciate not only the special needs of aviation but the needs of the Army as a whole.****"

In accordance with the recommendation stated above, the Secretary of War directs that there be created in each of the Divisions of the War Department General Staff an Air Section, the duties of which will be to consider and recommend proper action on such air matters as may be referred to such divisions.

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WAR DEPARTMENT ORDERS AFFECTING AIR SERVICE OFFICERS

Changes in Station: 1st Lieut. Edward H. Wood from Middletown Air Intermediate Depot to Kelly Field, Texas.

1st Lieut. Lotha A. Smith from Kelly Field to Hawaiian Department, and to sail on or about April 27th.

1st Lieut. Burton F. Lewis from McCook Field to Panama Canal Zone and to sail on or about March 18th.

1st Lieut. Henry F. Sessions from Langley Field to Panama Canal Zone and to sail on or about May 13th.

Major Henry J. F.Miller (Office, Chief Militia Bureau, Wash.) and Capt. Henry Pascale, (Wright Field) to Hawaiian Dept. and to sail about March 12th.

1st Lieut. Robert J. Brown, Jr. (Boston Air Port) and 2nd Lieut. Charles D. McAllister (Selfridge Field) to Hawaiian Dept., sailing about April 22nd.

Capt. John W. Signer (Crissy Field) and 2nd Lieut. Lee Q. Wasser (Kelly Field) to Hawaiian Department and to sail about May 12th.

1st Lieuts. George W. Polk, Jr. and Leon E. Sharon (Fairfield Air Intermediate Depot) Chas. L. Williams (Langley Field) to Hawaiian Dept., sailing on or about April 22nd.

1st Lieut. K. B. Wolfe (Brooks Field), 1st Lieut. A.S. Heffley (Kelly Field) to Philippines, sailing on or about April 3rd.

Capt. Calvin E. Giffen from Rockwell Field to duty with Organized Reserves, 9th Corps Area.

1st Lieut. Reuben D. Biggs from Office, Chief of Air Service to Buffalo, N.Y. for duty as procurement planning representative of Air Service, that city.

1st Lieut. Earle J. Carpenter to Philadelphia as Air Service Instructor of Pennsylvania National Guard upon completion of tour of duty in Panama.

Following officers, upon relief from duty in Hawaiian Dept. to proceed to stations indicated: 1st Lieut. Ray A. Dunn to Fairfield Air Intermediate Depot;

1st Lieut. Grandison Gardner and Lloyd C. Blackburn to Langley Field; 1st Lieut. Arthur I. Ennis to Chanute Field.

Following named officers, upon completion of tour of duty in Hawaii, to proceed to stations indicated; 1st Lieuts. Wm. C. Goldsborough and Arthur G. Hamilton to Kelly Field, 1st Lieut. Alfred L. Jewett to Marshall Field, Kansas. Capt. Edward Black from Langley Field to Baltimore, Md. as instructur of Maryland National Guard.

2nd Lieut. George B. Peploe from Primary Flying School, Brooks Field, to Fort Sam Houston, Texas, for duty with 2nd Division.

Capt. Ivan B. Snell from Office, Chief of Air Service to Primary Flying School, Brooks Field, Texas, for course of instruction.

Following officers relieved from duty at Scott Field, Ill., and to proceed to Brooks Field, Texas, for course of instruction: Capt. Roland W. Wittman, 1st Lieut. Joseph P. Bailey, 1st Lieut. Lawrence A. Lawson.

Leaves of absence: Capt. Ivan B. Snell, one month, 15 days, Feb. 2nd; Major Thomas G. Lanphier, four months from Jan. 30th; 1st Lieut. Matthew E. Finn one month, 20 days, from February 15th.

Transfers: 2nd Lieut. Hubert W. Ketchum to the Cavalry and for duty with 1st Cavalry Division, Fort Clark, Texas.

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"EDD TELLS ABOUT AIRODYNAMIC COURSE AT MC COOK COLLEDGE

McCook Eng. Colledge,
Engineering & flying
Jan. 22, 1926

Friend Ed -

Old McCook colledge has again came to the forefront of educational institutions by winding up the 1st semester without no casualties. None of the local newspapers can make the annual crack abt "The following well known & popular students have, by special arrangement with the faculty, discontinued their studies for the present year in order to accept LUCRATIVE POSITIONS".

Well Ed we may all have got by the first half but it looks like they were going to gang up on us in the final frames. The reason everything went so good up to Christmas was due to the fact that it was all about subjects like mathematics mechanics chemistry electricity & the etc & all as the instructor

had to do was to learn you what he could & watch out you didnt go to sleep on him. Whatever the instructor said was jake with I & all. There wasnt no one wanted to fight about his own personal ideas on three moment equations or when is a eutectoid for the reason that he didnt have no ideas abt these things personal or any other kind. But take it from yr correspondent Ed all was changed when some of the wizzards from the airplane section opened up the hangar door dragged out the tee and announced that they would proceed to learn us some airodynamics.

"Gentlemen" says Mr. Gearhardt, removing his glasses & taking off his coat & vest,""it is my duty to open up a discussion on airodynamics in general & the modern conception of DRAG--".

"Why mention drag in the Air Service", says Major Milling with a hollo laugh, "I can prove to you Mr. Chairman that under the naval appropriations of 1924 the ---".

"One moment Major", cries Dave Lingle,"If I can step out & get my brief case - I have some figures ---".

"Never mind no figures", barks Houghton, "take a look at Rockwell Field & burst out crying".

"The DRAG of AIRFOILS & entire airplanes", yells Gearhardt,"in the air, the AIR - AIR ---".

"He wants air", says mack Pike who is a lawyer & can spot the bonus of contention,""leave him go ahead & incrimminate himself".

"What I mean gents", resumes Gearhardt, thoughtfully hefting the inkwell, "is that when we began to abandon the conception of Drag on the purely experimental basis of the attitude of the body in favor of a basis which would allow if a mathematical expression of functional relationship between the Lift and Drag components we saw that the attitude of the airfoil or of the airplane had no series of values which were susceptible to measurement in terms of such functions as could be derived to express the Lift - Drag relationship, So, for the purpose of our present discussion gentlemen we will assume that it is immaterial what the Attitude of the airfoil or airplane might be and ---"

"Question," yells Whitehead, pulling out of a 10,000 feet dive 2 feet above the surface of lake Saint Clare,"do you mean to say that in flying an airplane like for inst the PW 8 it dont matter what attitude you fly at?".

"Whats a PW 8 know about mathematics, "says Woolsey eating a couple of inches off a good govt pencil, "now I fixed up an educated Jennie at Brooks Field with a rubber prop and ---".

"How about a Martin Bomber?" butts in Jawn Whiteley,"I see a coupla times when I would of swapped all the mathematics in the colledge for a little better attitude & I dont mean maybe."

"What attitudes can a bomber get in if any,"hollers Breene, "You dont know nothing about attitudes why when I was instructing at Brooks my students --

"There 'y go dragging in Brooks Field again", howls Moorman, "over at the San Antonio Depot we ---".

"Shut up," yells Houghton, "You aught to watch them navey mathematicians disregarding attitudes down at San Diego,and ---".

"What san Diego got to do with flying anyway,"hollers Lampton, "now up in Hollywood where I come from ---".

"Well I may not be no ace myself but I dont see no croy de gare on you, buddy ---".

"--oh is that so well mr. Smart alleck I got about 2 thousand hours in round nos & laugh that off ---".

"--and I guess I know just as much about flying as any --- ---- pursuit pilot, & as for you Dave Lingle ---".

"Put down that chair leg Breene & come outside & Ill ---".

"--I dont care if Macready did say so, it stands to reason that --"

"Is that so, well I may be sawed off but no mack Pike ever let a big bozo like you get away with ---"

"--make a crack about me being a rocker-arm flyer hay?"

"Youre a liar it was foggy & you can ask Bock if ---"

* * * * * * * * * *

Bell rings without, as Shakespeare says.

Mr. Gearhardt, (emerging from under the desk). Lecture's over gentlemen.

All sort themselves out, brush themselves off & exeunt L.

Yrs for higher education,

ED.

Kelly Field, San Antonio, Texas, January 15th.

Officers of the 10th School Group began on January 6th to take turns in flying one of the new Douglas O-2 observation planes which was ferried from Santa Monica, Calif. The other two planes are being overhauled and will be placed in service as soon as they are ready to fly. After the instructors have become familiar with the new ships they will be used as training planes for students of the Advanced Flying School during specialized training in observation and attack aviation.

During the past two weeks the 3rd Attack Group made great strides in the active training of the Air Force personnel and the Ground Forces. Classes covering every phase of the training of the ground force enlisted personnel are being conducted by competent enlisted instructors,and the Air Force is being extensively trained in all air tactics.

Kelly Field, San Antonio, Texas, January 26th.

A total of 34 applications for examination to the grades of Master Sergeant and Technical Sergeant were submitted from this Group, in compliance with Circular No. 35-2, O.C.A.S., and now await action of the Chief of Air Service to appoint the board for same.

Captain Wm. E. Lynd in addition to his other dutues is the proud father of an 8-lb boy, which arrived Saturday morning. Everybody concerned is doing nicely.

The Third Attack Group received the first of six XO-2 Douglas airplanes on January 22d. Lieut. I. B. Greene was the pilot, making the trip from Santa Monica without incident. Immediate steps are being taken to adapt this ship as an Attack Aviation airplane.

During January, the Third Attack Group furnished two pilots for the Airways to Scott Field, Illinois; namely - Lieuts. Norme D. Frost and Earle E. Partridge.

Mr. and Mrs. Charles Burt Kelsey, Madison Avenue, S.E., Grand Rapids, Michigan, announce the marriage of their daughter, Anne Kelsey McRae, January 12, 1926, to Charles McKinley Robinson, 1st Lieut. United States Army, Air Service. Lieut. Robinson is Adjutant and Operations Officer of the Third Attack Group, Kelly Field, Texas.

The fight cards held at the Kelly Field Post Gymnasium are becoming very popular, both with personnel of this Field and many civilians of San Antonio. These fights are held monthly and each new card seems to be better than the last.

In an exciting polo game played on Kelly Field on Sunday, January 10th, the Second Division beat Kelly Field by the close score of 7 - 4. It was an interesting contest from start to finish.

Camp Meade handed the Kelly Field Poloists a close defeat Tuesday afternoon, January 19th, at Kelly Field; the final score being 6 - 5 in favor of the visitors. Those witnessing the contest proclaim that the Kelly Field team were "glorious in defeat" and that the close score did much to soothe the pangs of a "let-down."

Captain Burdette S. Wright returned from Santa Monica, Calif., on Sunday afternoon, January 17th, flying a Douglas Transport.

On Friday afternoon, January 22d, five more of the new Douglas service planes landed on Kelly Field after the long trip from Santa Monica, Calif. The flight was commanded by Major Carlyle H. Wash, and the other pilots were Lieut. C. E. Duncan, Lieut. Wm. B. Souza, Lieut. E.D. Jones, and Lieut. E.B. Greene. A sixth Douglas plane accompanied the flight, piloted by Captain Quinn of Bolling Field, who is taking the Douglas to his home station. The five new Douglas service planes bring the total number of these ships to eight. Thirteen more are to be brought here. Of the eight Douglas ships now at Kelly Field, seven are assigned to the 10th School Group and one to the 3rd Attack Group. The new Douglas will eventually supplant the DeHaviland as the standard service plane of the army.

Langley Field, Hampton, Va., January 18th.

96th Bomb. Squadron: The squadron furnished a five-plane formation as a component in the group raid on Washington, D.C. early in the week. Lieut. Colliver commanded our unit and no trouble was experienced with any of the planes.

Lieut. Mulzer is expected to return this week from Fairfield. He was snowbound in the west for some time and his absence has been keenly felt by our basketball team.

Our new Operations and Engineering Officer is Lieut. E.R. McReynolds, recently of Bolling Field, who has just been assigned to the Group and has already taken over his new duties.

11th Bomb. Squadron: This squadron flew about 20 hours last week, most of the time being cross-country formation to Bolling Field. The squadron is 100% efficient this week, having every ship in commission.

20th Bomb. Squadron: On Dec. 14th the squadron team journeyed to Fort Monroe, making its initial appearance of the season against the basketball team of Battery A, 61st C.A.C. At half the time the score was 20 to 10 in favor of the 61st Battery. In the second half the squadron team rallied and as the end of the game drew near the score stood 34 to 30 in favor of the battery. The score being so close and the game being so interesting, a return game was played Dec. 19th with Battery B of that station.

A.S.T.S. Detachment: The A.S.T.S. finally awoke after receiving word that their badketball team sure is a humdinger. On Dec. 10th Battery A, Anti-Aircraft fell before them, proving that the Air Service is supreme in other than aerial attacks. On Dec. 15th they tied the highly praised Phoebus Athletics, and on Dec. 22 the High School from Hampton, Va. came out on the long end of a 21 to 20 score.

Langley Field, Va., January 26.

20th Bomb. Sqdn. On Jan. 14th the Basketball team decisively defeated the 11th Squadron team. Corporal Bolls of the 20th proved to be the star of the game, scoring 18 of the 42 points, the final score being 42 to 12 in favor of the 20th.

96th Bomb. Sqdn. The members of the 96th Bomb. Sqdn. is extending their thanks to the Recreation Dept. of Langley Field for the enjoyable vaudeville show presented at the Post Theatre on the night of Jan. 24th. It is requested by the members of this organization that more shows of this type be shown at this post if possible.

Brooks Field, San Antonio, Texas, January 11th.

Flying time, due to bad weather, was reduced last week, and is as follows: Daily aircraft hours, 661.43; Daily man hours, 1528.26; Daily cross-country hours, 154.23; Daily cross-country man hours, 278.51.

Several visitors have dropped in on us the last few days. Lieut. Haddon, of the Naval Air Service, attached to the battle fleet and recently stationed at San Diego is here for a few days on his way to Pensacola where he will act as instructor of Naval Air training. Lieut. Haddon is the brother of Lieut. Julian B., better known as Prof., who was our officer in charge of flying for so several years and who is now stationed in the Philippine Islands. The two Haddons look as much alike as the Smith brothers and if the Naval Haddon were to put on Khaki we might think Prof. had returned to his old haunts.

Lieut. Chauncey from the Chief's Office also dropped in on us yesterday and is the same Chauncey who left us two years ago. From the beam on his face and on those who served here with him one might have thought he was a long lost brother. Major Brett, in charge of the Field Service Section, Fairfield is also here for a few days on a technical inspection and Major Kerns of the Medical Department reported here for duty and will relieve Major Brailsford who has been here on temporary duty pending the permanent assignment of a flight surgeon.

A handball court is soon to be built behind the bachelor quarters, the Tennis courts being so crowded that there is quite a congestion among the athletically inclined. A handball court will probably relieve much of this congestion and do away with the long wait necessary now before a court is vacated, which has tended to considerably dampen the ardor of local athletes and weight reducers.

Those who visit Brooks Field a few months from now may be surprised to find the landing field and all ground around the hangars covered with very green and luxurious grass. An experiment is going on at present, ground in front of two hangars being plowed up and grass has been planted to see if it really will grow in Texas. If so, we intend to gradually get the whole field covered with a now practically locally unknown vegetation.

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The field as a whole and students in particular have been fortunate this year as regards crack-ups but such things are not unknown. The prize one the past week was that of one of our cadets who while flying around a ship on the ground which had landed out of gas, became so interested in the ship on the ground he forgot to fly his own and consequently spun in. Fortunately he was not badly hurt. Twenty four more would-be cadets are taking their examination today for the March class, better luck to them.

Lieut. Lawrence returned from leave a few days ago with a blushing bride along. When Lieut. Craigie gets back with his newly acquired wife, he and Lawrence can go around to see Schlatter who succumbed about a month ago and compare notes on the blessings of married life. Schlatter has a slight advantage at the present time for he has picked up a little extra weight around the waist line and no doubt will claim it due to his wife's cooking. The lies that are about to be told.

The Officers' Club will be the scene of a card party tonight. With a hundred officers present an enjoyable evening should ensue. A bridge class has also been inaugurated with fifty or more officers signed up, classes to be held weekly beginning Tuesday. Let this be a warning to any one who may be tempted to get in a bridge game with Brooks Field officers after, say the first of June, for all of us should have absorbed quite a bit of instruction by that time. A dance, strictly Air Service, due to the fact that our club is small and the weather is too cold for it to be held in the big hangar will be held on the 29th. Social life seems to be looking up a bit.

Brooks Field, San Antonio, Texas, January 22.

The Flight Surgeon's Office is a bee hive of industry, all the permanent and student officers taking their physical examinations. There are approximately 200 officers on the post, and consequently, there is little time for visiting among the medicos.

Flying time for the past week was as follows: Daily aircraft hours, 948:55; Daily man hours, 1429:25; Daily cross-country hours, 63:35; Daily cross-country man hours, 115.

The new Baker Hotel in Dallas, supposedly the best in Texas, has announced dollar-a-day rates to army officers staying overnight at their hotel. Dallas with their free shows and discount on meals, is surely offering every inducement possible to attract Air Service officers to their town and show every courtesy possible when we drop in.

Plans for a post garden are being started. When planted we expect the squadrons will be furnished with many garden vegetables at quite a saving over prices down town.

Lieut. Chauncey from the Chief's office, who has been here for several days on temporary duty left for his home station. It has seemed like old times to have Chauncey's smiling face with us again, and we wish his stay could have been longer.

Lieut. K. B. Wolfe received his orders to sail on the transport of April 3rd for the Philippine Islands. K.B. has been with the Primary School for so long it will seem as if one of the old landmarks is gone when he leaves. Several more of the old instructors are also expecting orders before long, but if all get orders who expect them, Brooks Field will indeed be officered by practically all new blood.

We spoke too soon in our last letter of crack-ups. No sooner had the letter gone in before three students succeeded in completely washing out three ships, and Lieut. Kennedy was forced to land in a small lake when his motor quit. Fortunately, no one was badly hurt though one student is in the hospital at the present time with minor injuries.

The bridge class inaugurated by the officers of the post has gotten under way. Meetings will be held every Tuesday evening.

Biggs Field, Fort Bliss, Texas, January 23rd.

Our Commanding Officer, Major John N. Reynolds, who left January 8th by plane for San Antonio on business was taken sick there with a severe cold and is still confined to his temporary quarters at San Antonio. Last reports indicate a decided improvement, however, and we expect to have our C.O. with us again early next week.

About ten of our commissioned officers, 12th Obs. Squadron and 1st Photo Section are busily engaged during their spare hours "boning up" and studying in preparation for the coming examination for promotion to 1st and 2nd grade.

It is believed this examination will be held in May.

Major C.H. Wash, leading a flight of six new Douglas Observation planes arrived here January 21st enroute to Kelly Field from Santa Monica, Calif. The other pilots were Capt. O.H. Quinn, Lieuts. A.B. Greene, C.E. Duncan, E.D. Jones and D.B. Souza, all Air Service officers from Kelly Field. These ships constitute the second allotment of the new observation planes for Kelly Field passing through this station. All ships took off for Kelly Field on the 22nd.

Major Bernard Cummings, Reserve, is at present a member of a Reserve Officers Training Camp for Air Service Reserve Officers at this field for the period January 17th to 31st, inclusive. Major Cummings, whose home is in Craig, Colo., is receiving daily training under the supervision of the Regular Air Service officers at this field in all phases of air work.

The 12th Obs. Squadron and 1st Photo Section were recently inspected by Brigadier General Joseph C. Castner, Commanding General, 1st Cavalry Division. He expressed his satisfaction with the command, personnel, as well as ships. Lieut. Leonard Weddington, pilot, with Master Sgt. W.R. Rhodes, as photographer, then took the air for the purpose of photographing the entire command of the First Cavalry Division, Fort Bliss.

Captains Walter Bender, Adjutant, and L. S. Johnson, Flight Surgeon, 1st Lieut. Charles Douglas and Staff Sgts. Pierce and Tyler, 12th Obs. Sqdn., recently departed in three DeH planes on a cross-country flight to Vermigo Park, N.M. Upon arrival there they spent two days deer hunting and returned with three handsome bucks.

San Antonio Air Intermediate Depot, Duncan Field, San Antonio, Texas, Jan. 12.

The bright chap who sawed the bridge from under him had nothing on the gas engineer at this Depot who hunted a gas leak, in the steam heating plant, with a lighted match. If the gate watchmen had not stopped him he would be going yet Recently, about midnight, Capt. Langtry, Q.M.Corps, answered the "SOS" and got out of bed when the thermometer stood at 18 degrees (in "Sunny San Antonio") to cut off the gas. Serious damage was narrowly averted by his cool judgment and prompt action.

Lieuts. Vanaman, Aldworth and Chapman returned by rail from Selfridge Field, Mich., where they had ferried three AT-1 planes turned out by this Depot. Among other points of interest on the trip, they visited the Stout Airplane Plant at Detroit.

We are glad to receive back into our midst Warrant Officer Mayberry, who had quite a siege of sickness in the Hospital at Fort Sam Houston since the first part of September.

A matter of great regret to the Depot was the departure of Lieut. Lewis A. Dayton for the Rockwell Air Intermediate Depot, Rockwell Field, Calif. Lieut. Dayton is under orders for foreign service, and is slated to sail for Hawaii about April 2nd. He will be on temporary duty at Rockwell Field until time for sailing. With his family he left this station enroute by auto to Rockwell, accompanied by the best wishes of the command.

Lieut. McMullen recently left this Depot, ferrying a TW-5 plane to Maxwell Field, Montgomery, Ala., for delivery to the Air Officer of the 4th Corps Area. From there he left on an extended leave of absence in his native State of Florida. We learn to our regret that he is likewise scheduled for foreign service, to sail for the Philippines about April 3rd.

Lieut. Brophy, who has been appointed as our Adjutant, with all the parallel jobs accompanying, appears with his new boots freshly shined each morning; he has also acquired the latest model of "Beau Brummel" shirt, a consignment of which was recently received by our Post Restaurant and which, upon arrival, were found to be marked with the trade name "Brosephus".

Much to our surprise, "Old Sol", who serves the Government activities in this area faithfully and unremittingly, was granted a few days vacation from his arduous labors by the weather man, beginning with Christmas. The thermometer at one point shrunk to 18, and a light flurry of snow fell, sufficient to give ocular proof to the younger generation in this vicinity of the actual existence of such a thing.

Lieuts. Clark and Ignico availed themselves of a few days' hunting leave and on their return Lieut. Clark reported having taken a twelve-point buck deer and a bad cold, while Lieut. Ignico's bag was one duck and one good ducking.

Another specimen of letter received at the San Antonio Depot:-

"The Aviator-in-Chief,
Airplane Making Depot,
Duncan Field, San Antonio, Texas.

My dear Sir:

I am taking the liberty of writing you with regard to my only son, Reginald Edward, whom I am most anxious to have enter the Aeroplane Service of our Country.

I do not know what the exacting requirements are for a sturdy young American man to enroll in the Military Branch of our Government and become an Aviator but will give you a brief history of him and his accomplishments so far, and we are very proud of him.

On June 10, 1908, he was born at nine in the morning, on a grand, bright, sunny and memorable day, coming just like the opening of a splendid rosebud. In fact, June is the mid-year month for roses, and I think that accounts for his very delicate rose complexion that he has now. He developed quite rapidly, after birth, in a physical sense, and at the age of three, he was able to get about in the house very well. In addition, his intelligence showed up very markedly, and when nearly four years of age, he began shouting "Ba - ba!" with much glee and we knew then he would become a man of superior intelligence. We took every precaution to insure his perfect physical and mental development and when he became six years old sent him to Miss Eliza Sloan's Kindergarten. He did so well in Miss Sloan's school that he was selected to recite Donby's "Little Bo-Peep" at the end of his second school term and he was only seven years old then. I made him the cutest corduroy knicker suit, with a fine large collar waist, and brown and white stockings and nut-brown shoes, and he looked just too cute for anything. I wish you might have seen him, for I know you would have enjoyed seeing and hearing him.

We then decided to send Reginald to a select boarding school for boys and he was sent to Miss Rimes' Academy, where he remained until he became fifteen years of age. During his tutoring at Miss Rimes' Academy he had every attention and requisite necessary to insure his full mental and manly development, and was surely a fine looking boy - in fact the other boys used to call him "Sweetie"- he looked so dear and lovable. We made it a point to see he did not ruin his gastronomical organs while growing. Reginald has never been permitted to eat pretzels or bananas after six o'clock at night, nor has he been encouraged to eat coarse foods. Of course, he has eaten eclairs and sweet pickles a number of times at night, when the girls would come over to our house and join him in knitting. Reginald has become quite proficient in his ability to knit and has really made a number of dainty knitted pieces, which he gave to one or the other of the girls.

Then, too, we have striven to keep him genteel and sweet, by not having him indulge in those rough athletic games so much in vogue these days. Added to this he has been trained to keep up a very exacting routine each day to insure his good appearance and good health. Each morning he partakes of a lukewarm bath, using lavender bath salts and a delicately perfumed toilet lotion. He also takes a milk face-and-hands rub each night upon retiring, so I believe you could say he is in prime condition physically. Our dear boy is now a young man, upstanding and about to begin his career in life. We have often watched aeroplanes pass over the house and each time this occurred, Reginald has gone to the windows and earnestly watched them fade away in the distant sky and I am sure he is vitally interested and would make such a charming aviator. He also shows a mechanical bent as several times when using the sewing machine in the making of foot warmers, which he knitted for himself so well, the leather belting on the small motor came off - but Reginald very promptly put it back on without even calling anyone to help, and that indicates he has mechanical ability. I am inclosing a recent photo of him. Just look at those heavenly eyes - his lovable face and also note how well he wears his clothes. I am sure you will agree he is a most charming boy.

If you will be kind enough to give Reginald's qualifications careful consideration and let us know what the next step will be to apply for his appointment to become a Military Aviator, I shall be most grateful. If one of your aviators could fly down here some day, he could personally meet and talk with Reginald. We have tea and milk cakes each day at four and would be glad to have one of your officers call at that hour.

Respectfully,

Torres-on-Rio,
Nov. 24, 1925."

Mrs. Abigail Burns Weston.

TO COMMANDING OFFICERS OF AIR SERVICE FIELDS

Quite a number of Air Service fields have not sent in contributions to the NEWS LETTER for quite a while. One of the purposes of the NEWS LETTER is to disseminate information covering activities at the various Air Service fields, both in the United States and the Insular possessions. It can be readily appreciated that the non-receipt of news items from any particular field handicaps to that extent the efforts put forth to make the NEWS LETTER a truly representative organ of the Army Air Service. What is required is the wholehearted cooperation of every Air Service activity.

New items from the following fields have been conspicuous by their absence for a number of months, and it is requested that the information officers stationed thereat proceed to arouse themselves from their lethargy and begin sending in their news contributions at least twice a month:

Mitchel Field, L.I., New York.
Maxwell Field, Montgomery, Ala.
Selfridge Field, Mt. Clemens, Mich.
Chanute Field, Rantoul, Ill.
Pope Field, Fort Bragg, N.C.
Middletown Air Intermediate Depot, Middletown, Pa.
Bolling Field, D.C.
Scott Field, Ill.
France Field, Panama Canal Zone.
Luke Field, T.H.
All stations in Philippines.
Phillips Field, Aberdeen Proving Grounds, Md.
Post Field, Fort Sill, Okla.
Wheeler Field, T.H.

Contributions from Reserve and National Guard activities will also be welcomed.